

## ABSTRACT

A method for sorting and stacking stackable storage objects where the storage objects consist of at least three stacks. The method includes the steps of identifying and marking each storage object with a sequence number for each object in a withdrawal order. Identifying the lowest unmarked storage object above a mark storage object in each stack. Categorizing the stack containing the identified lowest unmarked storage object as a first stack and categorizing each remaining stack as a second stack. Moving each storage object from the first stack onto one or more of the second stacks until the identified lowest unmarked storage object is on top of the first stack. Sorting and moving all of the marked storage objects from the second stacks onto the first stack. Moving each of the storage objects in the arrival stack to one or more second stacks. Moving each of the marked storage objects to the second stacks from the first stack. Terminating the method when each of the marked storage objects in each of the second stacks has a lower sequential number than the marked storage object below the marked storage object in a second stack. Rearranging the order of the marked storage objects in the first stack and repeating the steps of moving each of the marked storage objects to the second stacks from the first stack and rearranging the order of the marked storage objects in the first stack until each of the marked storage objects in each of the second stacks has a lower sequential number than the marked storage object below the marked storage object in a second stack.